

# **The Internet and Business Process Outsourcing in East Africa**

**Value Chains and Networks of Connectivity-Based Enterprises in  
Kenya and Rwanda**

\*\*\* Executive summary \*\*\*

Laura Mann, Mark Graham, Nicolas Friederici

This publication was based on research funded by the ESRC and DFID. Grant reference (RES-167-25-0701) and ESRC reference (ES/I033777/1).

Oxford Internet Institute 2014

For more information about our work:

[oii.ox.ac.uk](http://oii.ox.ac.uk)  
[cii.oii.ox.ac.uk](http://cii.oii.ox.ac.uk)



All material in this report is released under a CC BY-NC-ND licence. You are free to download and share the publication.

## EXECUTIVE SUMMARY

### Background and study setup

Internet connectivity is widely considered to be a game changer for knowledge economies of developing countries. The arrival of submarine fibre-optic underwater cables in East Africa in 2009 and 2010 is seen by many as a strong case in point. The fast evolution of the information and communication technology (ICT) landscape of Kenya and Rwanda that ensued has attracted the attention of actors from private investors, development agencies, NGOs, policymakers and many other groups. Kenya became a role model for its wide-spread adoption of mobile money services and a burgeoning ICT application development sector; Rwanda's government became known for its explicitly ICT-oriented development agenda as well as large-scale ICT projects in government, health and education that aimed to latch onto fast-growing mobile subscription rates and 3G network roll-outs.

For this report, we set out to examine the role that changing connectivity has played for a particular component of the ICT sector in Kenya and Rwanda: ICT-enabled business process outsourcing (BPO).<sup>1</sup> BPO has been a priority in the national ICT strategies of both countries, so we anticipated this sector to provide a fertile ground for comparing expectations and practices of the roles that changing connectivity has played following the deployment of fibre-optic cable infrastructure.

BPO is also an interesting sector because internet connectivity is at the heart of its value chain: At first glance, fast internet connections should go a long way in bridging geographical distance and enabling Kenyan and Rwandan businesses to tap into continuously growing BPO demand from all over the world. BPO is also inherently a global, or at least a widely geographically distributed, industry. Our analysis was therefore designed to shed light on the risks and opportunities of establishing connectivity-based local sectors that are bound to be exposed to international markets and competition.

We used an analytical framework that honed in on the effects of increased internet connectivity on the value chains of the BPO sector. Since we wanted to examine potential benefits and risks of changing connectivity for *local* BPO businesses in Kenya and Rwanda—that is, businesses that create and extract economic value through and for individuals regularly located in Kenya and Rwanda—we further examined the interaction of value chains with geography and the locations of different actors on those chains. We wanted to identify both the geographically contingent exchanges that happen

---

<sup>1</sup> In other reports produced in the context of this project, we examined the tea and tourism sectors of Rwanda and Kenya. They are available on the Oxford Internet Institute website (<http://cii.oii.ox.ac.uk>) or upon request from the authors.

along the BPO value chain and the exchanges that happen locally across the value chains of related sectors.

Our team of researchers from the Oxford Internet Institute developed a staged, in-depth analytical approach to elicit the expected and actual roles that changing connectivity played in the Kenyan and Rwandan BPO sectors. We first conducted a content analysis of 378 East African media sources to understand the hopes and visions invested in the arrival of fibre-optic cables. Once we started conducting interviews, we quickly found that mainly the Rwandan but also the Kenyan BPO sectors were less active than we had envisioned. We then included other kinds of ICT-based companies in our sample in order to understand the environment of the core BPO sector and potential barriers that had kept it from growing further. Broadening the scope also made sense as policymakers in both countries had come to recognize that the promotion of international BPO was likely to require more fundamental changes in the structure of their domestic economies. We ultimately conducted 102 interviews with policymakers and private sector representatives in both countries. Finally, two open focus groups in 2013, in Nairobi and Kigali, were used to corroborate preliminary findings, and to disentangle inconclusive ones.

## Findings

### **Relevant sectors and value chains**

1. An active BPO sector was found to exist in Kenya but not in Rwanda. Even Kenya's, over a decade-old, BPO sector has not been able to capture large amounts of work from foreign clients, falling far short of original hopes and expectations.
2. Two additional sectors within local ICT industries have distinct value chains while also playing a role in shaping the BPO sector: *ICT innovators* (e.g. such as start-ups developing new applications and software) and *ICT connectivity enhancers* (e.g. such as electronic payment intermediaries).
3. The three sectors together (BPO, ICT innovators and ICT connectivity enhancers) can be summarized as *connectivity-based enterprises*: these businesses provided content and services through value chains and networks that depended on ICT infrastructure (hardware and software) put in place by local and international ICT corporations or government entities (such as subsidized/government-owned and private mobile network operators, device manufacturers, and software multinationals).

We first outline findings that apply specifically to the BPO sector, before outlining findings that hold more broadly across all three connectivity-based enterprise sectors.

## **BPO-specific findings**

### *1. Diverse but persistent (re-)intermediation*

The limited outsourcing opportunities that were available from international clients were usually subject to various forms of mediation: such as, through online platforms, through international consultants, through governmental or government-affiliated agencies or through impact sourcing agencies. Our observations also supported the idea of ‘re-intermediation’. Distributed work platforms like Odesk and elance, tended to offer East African BPOs only certain kinds of barely-profitable and non-sustainable work in a ‘take it or leave it’ format. Better connectivity also allows international consultants and more powerful companies to re-package and re-distribute work to Kenyan and Rwandan companies that are lower down in the chain. Kenyan and Rwandan BPO actors believe that this intermediation lowers their margins and that a greater degree of disintermediation would benefit the sector.

### *2. Understanding the market forces of global BPO value chains and networks*

As late follower countries for BPO, Kenya and Rwanda have faced strong competitive pressure from mature BPO industries in India and South East Asia. The local BPO sectors do not have the depth, scale efficiencies, cost-competitiveness and skill base to compete for international customers with established foreign BPO companies and markets. At times, local BPO companies themselves “re-outsource” their work abroad, hiring foreign companies, as this can still be cheaper than doing it locally. Due to a lack of international competitiveness, Rwandan and Kenyan-born BPO enterprises have largely expanded within their home countries or across Africa (for some Kenyan companies) but not globally. Kenyan and Rwandan service providers often find it more viable to attract outsourcing clients from their home countries, as they can offer a better fit of supply and demand (defined by provided/demanded quality and price).

### *3. Challenges of a late-follower learning curve*

In both countries, the sectors went through a learning curve concerning the potentials and limitations of BPO work. The main learning outcome was that internet connectivity does not fully eliminate the need for direct, trusted interactions with clients and an understanding of their needs. Both continue to be easier to achieve in markets close to the BPO operator’s own location or when temporary physical proximity (Torre, 2008) can be established (e.g. during shorter visits of international clients). It appeared no longer possible for Kenya or Rwanda to achieve the overwhelming scale efficiencies of Indian and other Asian operators. In contrast, as early movers, India and Asian countries had a unique opportunity to service clients from all over the world and establish their reputation and (national) brand over time. Notably, Rwandan interviewees expressed a firmer belief in the elimination of geographical distance due to internet-mediated connectivities. This might mean that

internet connectivity is an initial hurdle that prevents managers focusing on other hurdles until it has been transcended.

#### *4. The ambivalent role of international firms*

BPO firms from foreign countries settling in Rwanda or Kenya brought benefits of enhancing the local sectors' reputation and adding ties to foreign markets. However, potential negative consequences included the crowding out of local firms and a "race to the bottom", that is, BPO companies offering ever-lower wages to be able to offer a cost-advantage over BPO companies in other countries.

### **Findings for connectivity-based enterprises**

#### *1. The importance of skills, learning and combinations of local and global knowledge*

Value chains and networks of all connectivity-based enterprises relied heavily on learning and skill formation, in particular for technical knowledge such as in software development. Better Internet connectivity, through enabling access to open source software communities and resources, had a meaningful impact on enhancing the skills of Kenya's and Rwanda's work forces. Yet, hands-on mentoring, talent with complementary non-technical skills and exposure to new contexts and networking opportunities usually generated the greatest successes. International exposure in particular enabled actors to leverage the 'best of two worlds': local knowledge and a broader set of skills learnt from afar. This meant that a small but growing segment of local connectivity-based enterprises, offering services to domestic and African markets, has been able to derive a palpable net benefit from improved connectivity. Over time, the value derived from internet connectivity and the value derived from ICT-related skills appear to have mutually enhanced each other.

#### *2. Social connectivity and trust as necessary conditions for ICTs to bridge distances*

ICTs could not replace or make superfluous the need to establish trusted social relations with clients and business partners to enable economic interactions. This was true even though value chains of connectivity-based enterprises were predicated on ICTs' distance-bridging potential. Connectivity-based enterprises engaged in value creation and extraction that served (end) customers at a distance (without face-to-face interaction), but any larger and more sustained economic transaction required the establishment of social connectivity and trust. Temporary geographical proximity between actors (for instance, during conferences or short in-country visits by international actors) was one initiator of ongoing transnational business relationships, but relationships were rarely "born online". Lacking conceptual connectivity—a collective and a priori trust between East African companies and foreigners—was often an important initial burden before any company would even be able to prove itself as trustworthy in a one-on-one relationship. The only exceptions were internationally operating

companies where trust was established via alternative pathways (such as the company's brand and reputation or broader contractual arrangements).

### *3. Domestic and regional markets as newly found opportunities*

Companies in all three sectors were largely focused on business generated within Africa. In Kenya, businesses were mainly focused on Uganda, Tanzania, and South Sudan. Rwandan-based companies were focused on similar countries, but also on the Democratic Republic of the Congo and Burundi. Increasingly, domestic and regionally proximate markets have revealed unexpected potentials, and have been developed into modest but sustainable and growing value creation and extraction opportunities.

### *4. Gateways and gatekeeping*

Connectivity-based enterprises followed diverse pathways of transitions and upgrades, usually based on iterative increases in social connectivities and trust. The most prevalent expansion paths proceeded from local to regional to global, and rarely was a 'born-global' strategy realistic. Small Rwanda- or Kenya-based businesses often began with one formal contract with a foreign client that helped them to establish themselves. Foreign large companies typically entered the Rwandan or Kenyan market through tenders for large projects. ICT innovators would start with website design or international and practical exposure and sometimes flourish from there. Government and large institutional actors occasionally acted (often unintentionally) as gatekeepers towards smaller firms through rigorous tendering requirements.

## **Recommendations**

Our findings led us to derive a set of recommendations for government agencies, policy, industry associations and development organizations that aim to foster sectors of BPO and connectivity-based enterprises.

### **1. Identifying a competitive edge for the local sector**

When attempting to support a globally active local sector that is already well established in other countries, policy should carefully weigh what competitive advantage the local sector will have over foreign competitors. Labour cost advantages might not be sufficient and might not outweigh scale efficiencies and learning advantages that foreign competitors have already established. Competitiveness might rather be derived from unique knowledge of, and access to, local and regional markets. A lack of local knowledge can also be a barrier for international companies coming into these markets.

## **2. Adopting a holistic perspective across sectors**

When establishing a connectivity-based enterprise sector such as BPO, policy needs to pay particular attention to other sectors that have related value chains and rely on similar input factors. Beyond internet connectivity, skills, reputation, regulation, the availability of mobile and electronic payments, access to risk finance and several other factors matter as enablers for connectivity-based enterprise sectors. Vicious and virtuous circles within and across related value chains have to be considered.

## **3. Considering social connectivity beyond internet connectivity**

There is an important difference between *accessibility* and *being accessed* through the internet. Connectivity-based enterprises, like any other business, rely on the awareness and the trust of their customers, suppliers, and partners to be able to make contracts and deals. These social factors are usually best established through personal contacts and social relations, which are rarely ‘born online’. Enabling temporary geographic proximity and venues for face-to-face interaction—for example, during events, conferences, and business and outreach trips—thus remains an important goal for governments and industry associations, even in the BPO sector.

## **4. Building a sector’s reputation**

By definition, connectivity-based enterprises work with customers and suppliers that are in a different location, so that trust is particularly hard to establish and sustain. If clients are generally sceptical of a country’s sector, an individual enterprise will find it difficult to obtain a chance at proving itself. Government agencies, policy, and industry associations have a role to play in ensuring a good overall reputation of a sector. Certification programs could be one important lever. Another might be to set up platforms that enhance matchmaking, accountability and the enforceability of contracts.

## **5. Setting realistic expectations for collective learning**

Implementation of technological infrastructures, including ICT and internet connectivity, is important, but actors need time to experiment and iterate through generations of value chains and networks that work for their context. Competitive advantages need to be identified and tested, and risks need to be taken. Policymakers and institutional actors need to allow for collective learning and knowledge spillovers between different actor groups and between different geographies and social contexts to support iterative improvements and adjustments.

## Conclusions

Our study outlined how policy, popular discourse and media got somewhat carried away by the promise of internet connectivity as the fuel for the growth of Kenya’s and Rwanda’s BPO sectors.

The development of ICT sectors fell short of many original hopes. Internet connectivity proved to only function as a catalyst for economic growth in combination with other enablers. Competitive advantage is always relative, and, in the case of Kenya's and Rwanda's BPO sectors, India and other Asian BPO destinations have maintained the edge in international markets. Despite the overall positive evolution of ICT-based subsectors in Kenya and Rwanda, the role of internet connectivity for growth in knowledge economies continues to be a complicated one, including for connectivity-based enterprises. Future opportunities might actually lie in 'close' (local and regional) markets, and policymakers (and indeed all economic actors) will need to continue to learn and adjust to other unexpected developments brought about by internet connectivity.